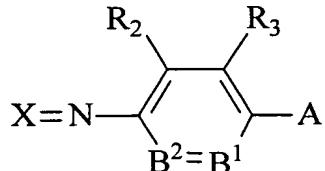


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An ink-jet ink comprising consisting essentially of a coloring composition containing a coloring particulate containing an ionic-group-containing polymer, an oil-soluble dye, and a hydrophobic high-boiling-point organic solvent having a boiling point of at least 150°C, the coloring particulate being dispersed in a water-based medium, wherein the oil-soluble dye is represented by general formula I:



wherein X represents a residual group of a color coupler; A represents -NR⁴R⁵ or a hydroxy group; R⁴ and R⁵ each independently represents a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; B¹ represents=C(R⁶)- or =N-; B² represents -C(R⁷)= or -N=; R², R³, R⁶ and R⁷ each independently represent a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano group, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, -NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹,

or $-NR^{70}SO_2R^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} , R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom, aliphatic group or aromatic group; and any of pairs, R^2 and R^3 , R^3 and R^4 , R^4 and R^5 , R^5 and R^6 , and R^6 and R^7 may bond together to form a ring structure;
wherein the ionic group-containing polymer is a vinyl polymer; and
wherein the content of the hydrophobic high-boiling-point organic solvent in the coloring composition is at least 25% by mass and not more than 95% by mass with respect to a total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

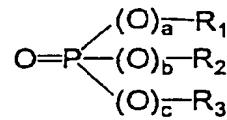
Claims 2 and 3 (Canceled)

4. (Original) An ink-jet ink according to claim 1, wherein a relative dielectric constant at 25° C of the hydrophobic high-boiling-point organic solvent is from 3 to 12.

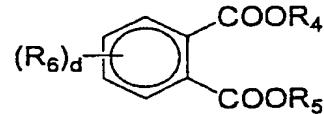
5. (Previously Presented) An ink-jet ink according to claim 1, wherein the ionic-group-containing vinyl polymer has at least one ionic group selected from the group consisting of carboxyl groups, sulfonic acid groups and mixtures thereof.

6. (Previously Presented) An ink-jet ink according to claim 1, wherein the hydrophobic high-boiling-point organic solvent is at least one hydrophobic high-boiling-point organic solvent selected from the group consisting of hydrophobic high-boiling-point organic solvents represented by following formulae S-1 to S-9:

Formula [S - 1]



Formula [S - 2]



Formula [S - 3]



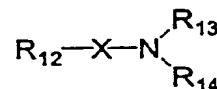
Formula [S - 4]



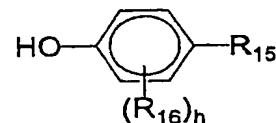
Formula [S - 5]



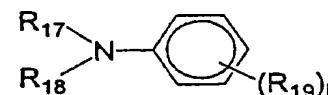
Formula [S - 6]



Formula [S - 7]

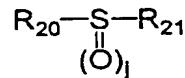


Formula [S - 8]



and

Formula [S - 9]



wherein: in the formula S-1, R₁, R₂ and R₃ each independently represents an aliphatic group or an aryl group, and a, b and c each independently represents 0 or 1;

in the formula S-2, R₄ and R₅ each independently represents an aliphatic group or an aryl group, R₆ represents a fluorine atom, chlorine atom, bromine atom, iodine atom, alkyl group, alkoxy group, aryloxy group, alkoxycarbonyl group or aryloxycarbonyl group, d represents an integer from 0 to 3, and where d is more than 1, one R₆ may be different from another R₆;

in the formula S-3, Ar represents an aryl group, e represents an integer from 1 to 6, and R₇ represents an e-valent hydrocarbon group or a hydrocarbon group that is mutually bonded by an ether bond;

in the formula S-4, R₈ represents an aliphatic group, f represents an integer from 1 to 6, and R₉ represents an f-valent hydrocarbon group or a hydrocarbon group that is mutually bonded by an ether bond;

in the formula S-5, g represents an integer from 2 to 6, R₁₀ represents a g-valent hydrocarbon group other than an aryl group, and R₁₁ represents an aliphatic group or an aryl group;

in the formula S-6, R₁₂, R₁₃ and R₁₄ each independently represents a hydrogen atom, aliphatic group or aryl group, X represents or -N-CO- or -SO₂-, and one of a pair R₁₂ and R₁₃ or R₁₃ and R₁₄ may bond together mutually to form a ring;

in the formula S-7, R₁₅ represents an aliphatic group, alkoxycarbonyl group, aryloxycarbonyl group, alkylsulfonyl group, arylsulfonyl group, aryl group or cyano group, R₁₆ represents a fluorine atom, chlorine atom, bromine atom, iodine atom,

aliphatic group, aryl group, alkoxy group or aryloxy group, h represents an integer from 0 to 3, and where h is more than 1, one R₁₆ may be different from another R₁₆;

in the formula S-8, R₁₇ and R₁₈ each independently represents an aliphatic group or an aryl group, R₁₉ represents a fluorine atom, chlorine atom, bromine atom, iodine atom, aliphatic group, aryl group, alkoxy group or aryloxy group, i represents an integer from 0 to 4, and where i is more than 1, one R₁₉ may be different from another R₁₉; and

in the formula S-9, R₂₀ and R₂₁ each independently represents an aliphatic group or aryl group, and j represents 1 or 2.

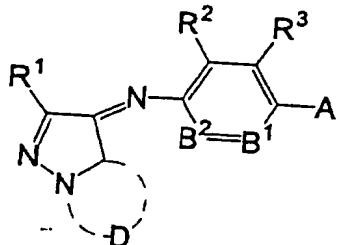
7. (Original) An ink-jet ink according to claim 1, wherein the content of the ionic-group-containing polymer is 1 to 70% by mass with respect to the total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

8. (Original) An ink-jet ink according to claim 1, wherein the content of the oil-soluble dye is 3 to 70% by mass with respect to the total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

9. (Original) An ink-jet ink according to claim 1, wherein average particle size of the coloring particulate is at most 100 nm.

10. (Previously Presented) An ink-jet ink according to claim 1, wherein the oil-soluble dye which is represented in said general formula I is a compound which is represented in the following general formula II:

General Formula II



wherein, R², R³, A, B¹, and B² are synonymous with R², R³, A, B¹, and B² in said general formula I:

R¹ represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²-CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹ or -NR³⁰SP₂R³¹;

R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, and R³¹ represent respectively independently a hydrogen atom, an aliphatic group or an aromatic group;

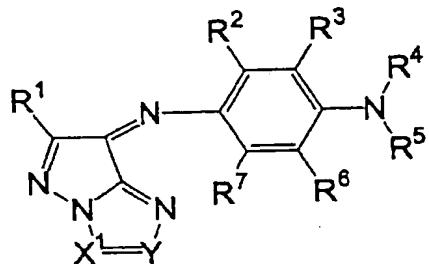
D represents an atom group which forms a five-membered nitrogen-containing heterocyclic ring or a six-membered nitrogen-containing heterocyclic ring which may optionally be substituted by an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR⁸¹, -SR⁸², -CO₂R⁸³, -OCOR⁸⁴, -NR⁸⁵R⁸⁶, -CONR⁸⁷R⁸⁸, -SO₂R⁸⁹, SO₂NR⁹⁰R⁹¹, -NR⁹²CONR⁹³R⁹⁴, -NR⁹⁵CO₂R⁹⁶, -COR⁹⁷, -NR⁹⁸COR⁹⁹ or -NR¹⁰⁰SO₂R¹⁰¹;

the heterocyclic ring may further form a condensed ring with another ring; and

R^{81} , R^{82} , R^{83} , R^{84} , R^{85} , R^{86} , R^{87} , R^{88} , R^{89} , R^{90} , R^{91} , R^{92} , R^{93} , R^{94} , R^{95} , R^{96} , R^{97} , R^{98} , R^{99} , R^{100} , and R^{101} represent respectively independently a hydrogen atom, an aliphatic group or an aromatic group.

11. (Previously Presented) An ink-jet ink according to claim 10, wherein the compound which is represented in said general formula II is a compound which is represented in the following general formula III:

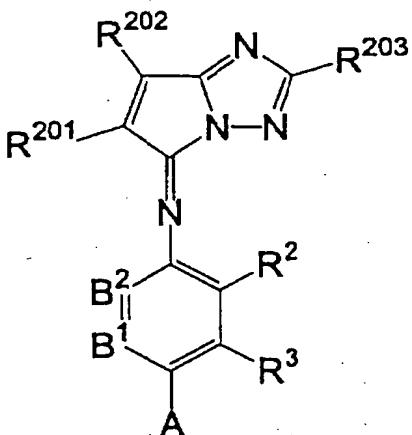
General formula III



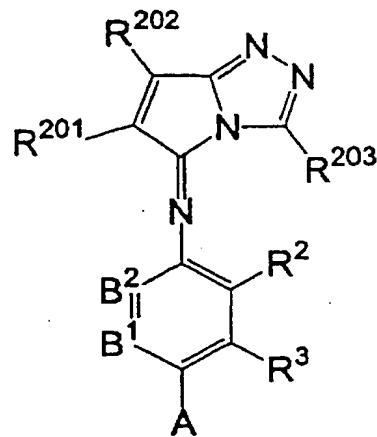
wherein, R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , and R^7 are synonymous with R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , and R^7 in said general formula II;

X^1 and Y represent respectively independently $-C(R^8)=$ or $-N=$;
 R^8 represents a hydrogen atom, an aliphatic group, or an aromatic group; and one of X^1 or Y is always $-N=$, and X^1 and Y are $-N=$ at different times.

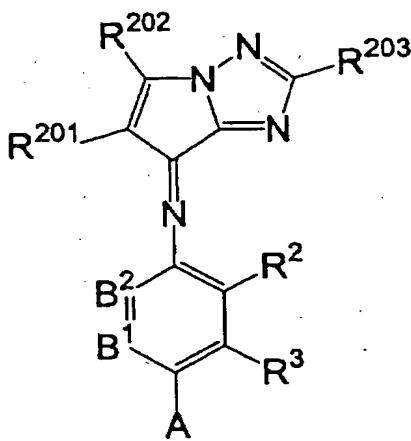
12. (Previously Presented) An ink-jet ink according to claim 1, wherein the oil-soluble dye which is represented in said general formula I is at least one compound selected from the group consisting of compounds which are represented in the following formulas IV-1 to IV-4:



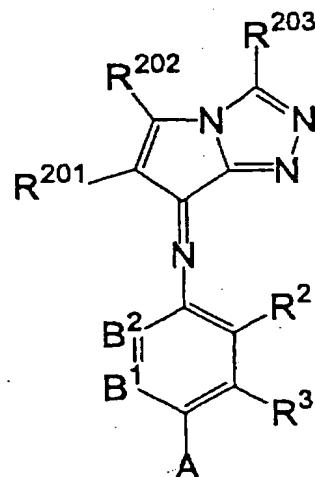
(IV-1)



(IV-2)



(IV-3)



(IV-4)

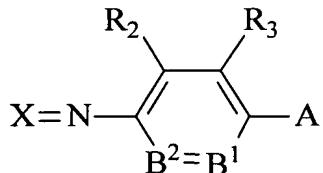
wherein, A, R², R³, B¹, and B² are synonymous with A, R², R³, B¹, and B² in said general formula I;

R²⁰¹, R²⁰², and R²⁰³ represent respectively independently a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹ or -NR³⁰SO₂R³¹;

R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} , R^{22} , R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , R^{29} , R^{30} , and R^{31} represent respectively independently a hydrogen atom, an aliphatic group or an aromatic group; and

R^{201} and R^{202} may be combined with each other to form a ring structure.

13. (Currently Amended) A coloring composition comprising consisting essentially of a coloring particulate containing an ionic-group-containing polymer, an oil-soluble dye, and a hydrophobic high-boiling-point organic solvent having a boiling point of at least 150°C, the coloring particulate being dispersed in a water-based medium, wherein the oil-soluble dye is represented by general formula I:



wherein X represents a residual group of a color coupler; A represents $-NR^4R^5$ or a hydroxy group; R^4 and R^5 each independently represents a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; B^1 represents $=C(R^6)-$ or $=N-$; B^2 represents $-C(R^7)=$ or $-N=$; R^2 , R^3 , R^6 and R^7 each independently represent a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano group, $-OR^{51}$, $-SR^{52}$, $-CO_2R^{53}$, $-OCOR^{54}$, $-NR^{55}R^{56}$, $-CONR^{57}R^{58}$, $-SO_2R^{59}$, $-SO_2NR^{60}R^{61}$, $-NR^{62}CONR^{63}R^{64}$, $-NR^{65}CO_2R^{66}$, $-COR^{67}$, $-NR^{68}COR^{69}$, or $-NR^{70}SO_2R^{71}$; R^{51} , R^{52} , R^{53} , R^{54} , R^{55} , R^{56} , R^{57} , R^{58} , R^{59} , R^{60} , R^{61} , R^{62} , R^{63} , R^{64} , R^{65} , R^{66} , R^{67} , R^{68} , R^{69} , R^{70} and R^{71} each independently represents a hydrogen atom,

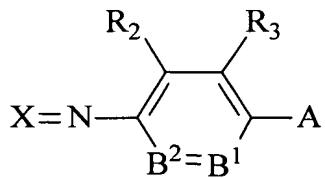
aliphatic group or aromatic group; and any of pairs, R² and R³, R³ and R⁴, R⁴ and R⁵,

R⁵ and R⁶, and R⁶ and R⁷ may bond together to form a ring structure;

wherein the ionic group-containing polymer is a vinyl polymer; and

wherein the content of the hydrophobic high-boiling-point organic solvent in the coloring composition is at least 25% by mass and not more than 95% by mass with respect to a total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

14. (Currently Amended) An ink-jet recording method in which recording is conducted using an ink-jet ink on a recording material, the ink comprising consisting essentially of a coloring composition containing a coloring particulate containing an ionic-group-containing polymer, an oil-soluble dye, and a hydrophobic high-boiling-point organic solvent having a boiling point of at least 150°C, the coloring particulate being dispersed in a water-based medium, wherein the oil-soluble dye is represented by general formula I:



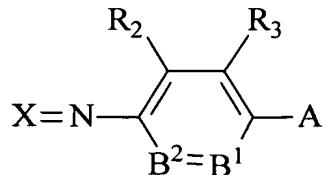
wherein X represents a residual group of a color coupler; A represents -NR⁴R⁵ or a hydroxy group; R⁴ and R⁵ each independently represents a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; B¹ represents =C(R⁶)- or =N-; B² represents -C(R⁷)= or -N=; R², R³, R⁶ and R⁷ each independently represent a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group,

cyano group, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, -NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹, or -NR⁷⁰SO₂R⁷¹; R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰ and R⁷¹ each independently represents a hydrogen atom, aliphatic group or aromatic group; and any of pairs, R² and R³, R³ and R⁴, R⁴ and R⁵, R⁵ and R⁶, and R⁶ and R⁷ may bond together to form a ring structure; wherein the ionic group-containing polymer is a vinyl polymer; and wherein the content of the hydrophobic high-boiling-point organic solvent in the coloring composition is at least 25% by mass and not more than 95% by mass with respect to a total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

Claim 15 (Canceled)

16. (Original) An ink-jet recording method according to claim 14 wherein the recording material includes a substrate on which is provided an ink receiving layer containing a porous inorganic pigment.

17. (Currently Amended) An ink-jet recording method comprising the step of:
(a) preparing an ink-jet ink containing consisting essentially of a coloring composition in which a coloring particulate containing an ionic-group-containing polymer, an oil-soluble dye, and a hydrophobic high-boiling-point organic solvent having a boiling point of at least 150°C are dispersed in an aqueous medium, wherein the oil-soluble dye is represented by general formula I:



wherein X represents a residual group of a color coupler; A represents -NR⁴R⁵ or a hydroxy group; R⁴ and R⁵ each independently represents a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; B¹ represents=C(R⁶)- or =N-; B² represents -C(R⁷)= or -N=; R², R³, R⁶ and R⁷ each independently represent a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano group, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, -NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹, or -NR⁷⁰SO₂R⁷¹; R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰ and R⁷¹ each independently represents a hydrogen atom, aliphatic group or aromatic group; and any of pairs, R² and R³, R³ and R⁴, R⁴ and R⁵, R⁵ and R⁶, and R⁶ and R⁷ may bond together to form a ring structure;

wherein the ionic group-containing polymer is a vinyl polymer; and
with the content of the hydrophobic high-boiling-point organic solvent in the coloring composition being at least 25% by mass and not more than 95% by mass with respect to total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent,

- (b) disposing the ink-jet ink in a cartridge adapted for use in an ink-jet printer, and
- (c) using the cartridge in an ink jet printer for recording images.

18. (Original) An ink-jet recording method according to claim 17, wherein the step of preparing an ink-jet ink includes the sub-step of dispersing the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling point organic solvent by a co-emulsifying dispersion technique.